ALGORITHM FOR SORTING BIT SEQUENCES IN LINEAR COMPLEXITY

Abstract of the Disclosure

A method and associated algorithm for sorting S sequences of binary bits. The S

sequences may be integers, floating point numbers, or character strings. The algorithm is

5   executed by a processor of a computer system. Each sequence includes contiguous fields of bits.

The algorithm executes program code at nodes of a linked execution structure in a sequential

order with respect to the nodes. The algorithm executes a masking of the contiguous fields of the

S sequences in accordance with a mask whose content is keyed to the field being masked. The

sequential order of execution of the nodes is a function of an ordering of masking results of the

10   masking. Each sequence, or a pointer to each sequence, is outputted to an array in the memory

device whenever the masking places the sequence in a leaf node of the nodal linked execution

structure.